

Abstract

An air cushion control system having an air chamber sensor including an air chamber, a bottom out sensor and an overinflation sensor, an air pump to inflate the air chamber, an air valve to release air from the air chamber, connections for the air cushion control system to an air cushion, and a microprocessor to control the inflation and the release of air from the air chamber. The air cushion control system reduces decubitus ulcers by incorporating both an automatic adjustment system to prevent the seated individual from bottoming-out in the air cushion and measure immersion depth to maximize pressure reduction.